

TRUST, COOPERATION, AND SELF-EFFICACY. A RESEARCH WITH SICILIAN ENTREPRENEURS

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ABSTRACT

Investigating the relationship between self-concept and potential territory was the aim of our research. Particularly, we have provided if the self-concept, self-efficacy and metacognitive ability of Sicilian entrepreneurs correlate with trust in Sicily Region institution. Moreover, if there was a positive correlation between high levels in these constructs and trust in another Sicilian firms. In the end, we provided if entrepreneurs, which have high levels in self-concept, self-efficacy and metacognitive ability, were good at seeing and understanding Sicily. Seeing the Sicily as potential territory to protective and to get reality.

Keywords: entrepreneurial self-efficacy, entrepreneur context, entrepreneurship.

INTRODUCTION

The Self-Concept Construct

The self-concept research has followed a unique course (Rosenberg, 1989). The first one, who introduced "self" in his book, was William James (1890). He published the longest chapter entitled "*The Consciousness of Self*" in "*The Principles of Psychology*", his classic two-volume work. In the beginning, the self-concept research did not assume a central role in the area of psychologist's interest. The systematic study did not start before a lapse of nearly 60 years (Raimy, 1948). Cause the increasing attention was to observable behavior excluding subjective phenomena. In fact, Rosenberg (1979, p.7) described this as "*the totality of individual's thoughts and feelings with reference to self as an object*". Our cause for reflection comes alive from Baumeister theory. The author declares that "self" needs of three human experiences (universal experiences) for providing the indi-

visibility. The “reflective awareness” refers to people becoming aware of themselves when they observe themselves in action, in social scenes. The “interpersonal identity” refers to people communicating self-image in social situations, when others look at them. The third aspect is “executive functioning” of self-concept includes the research about behavioural motivation, choice of decision making, self-regulation.

The Self-Efficacy Concept

Self-efficacy is linked conceptually and empirically to attribution theory, which has seen growing interest in entrepreneurship research (Gatewood, Shaver & Katz, 1992; Krueger et al., 2000; Markman & Baron, 2003).

The self-efficacy construct includes one's beliefs about himself, personal competences and control in a given situation. We decided to include it in our research because self-efficacy influences the way individuals manage situations, problems, and tasks. A person who says himself: “I can do it”, he is someone with high level of self-efficacy (Di Nuovo, Giovannini & Loiero, 1999). This variable is one of the best hallmarks that increases with experience and that is highly related to actual ability (Philips & Gully, 1997). Furthermore, entrepreneurial self-efficacy appears to be an important antecedent to new venture intentions and creation (Chen et al., 2009; Barbosa et al., 2007). In fact, entrepreneurship has been defined as “*the creation of new enterprise*” (Low & MacMillan, 1988). Through self-efficacy, people have the intention to start new actions and ventures. In this research, we assumed that trust in Region Institution or other firms is the hallmark of people with high levels of entrepreneurial self-efficacy, which is the perceived confidence in being able to start new collaborations and ventures.

Metacognitive Ability

In the entrepreneurial context, cognitive adaptability is necessary because “*contemporary business environments are characterized by rapid, substantial and discontinuous change*” (Hitt, 2000). Entrepreneurs must “*rethink current strategic actions, organization structure, communication system, investment strategies, in short every aspect of an organization's operation and long term health*” (Hitt, Keats & DeMarie, 1998). For this reason, we included in our research the variable “metacognitive ability”. Metacognition represents the control that people have over their learning and cognitions, as a function of a differing ability, between individuals, to be self-reflective and consider alternative cognitive strategies in light of a changing environment (Flavell, 1979, 1987; Schraw & Dennison, 1994). According to authors (Brown, 1987; Flavell, 1979, 1987) the metacognition describes a higher-order, cognitive process that serves to organize what individuals know and recognize about themselves, situations, tasks, and their environments in order to promote effective and adaptable cognitive functioning in the face of feedback from complex and dynamic environments (Haynie & Shepherd, 2009, p. 696). In fact, our research, measures it by MAC (Measure of Adaptive Cognition, Haynie & Shepherd, 2009) these abilities in Sicilian entrepreneurs.

The construct of trust

Trust was defined “*building block of healthy societies*” (Hill & O'Connor, 2005) but it is also weak and vulnerable (N'Goala, 2010). According to Paliszkievicz's thought (2011), trust “*may evolve through a process, but it may also devolve*”. It is composed of six aspects: *interpersonal* (it is created by interpersonal communication); *voluntary* (nobody has to obligate no one); *situation-related* (linked to one's experience life); *conscious* (every actor perceives to have confidence in other); *action-oriented trust* (understood in relationship's purpose). Moreover other authors highlight two important aspects of this construct: *cognition-based trust* or *economic trust*, and *affect-based trust*.

The *cognition-based trust* refers to trust in colleague's professional competence without emotional involvement (Gulati, 1995; McAllister, 1995; Larson, 1992; Shapiro, 1987), and it is generated from opinions about other people's interests, availability, competences and soundness. The *affect-based trust* is instead linked to the emotional dimensions of relationships (McAllister, 1995). Distrust is instead the polar opposite of the same continuum: consider that *ambivalence* (Lewicki, McAllister & Biers, 1998). The inclination to give trust derives from individual differences (Korsgaard et al., 2003), life experience (Ceric & Jarratt, 2015; Burt, 1992) and biological and cultural evolutionary processes (Fichman, 2003). Also, reputation, performance, and appearance of interlocutor are important variables to facilitate trust (Sztompka, 1999). Trust is indispensable for inter-firms collaboration (Tsai & Ghoshal, 1998; Pesa maa et al., 2013). In fact, people who have trust, have a propensity for sharing information (Mellinger, 1956; O'Reilly & Roberts, 1979) and giving mutual support (Bouty, 2000). Without overlook importance of trust in work group: trust lessens individual tendency to confuse task conflict with relationship conflict (Simons & Peterson, 2000).

Potential Territory

There is a particular interaction between territory and people. According to Lewin's thought (1935), the relationship between these actors is dynamic, the environment is not conceived in a physical sense rather in its psychological characteristics. The underlying logic is circular, that is bi-directional "in turn, people influence the idea of environment, changing meaning". Lewin showed like life space is subjective. This is determined by real life, and then determining to orient choices and behaviors. The territory is social space, meaning value, a real and proper scene of socialization space, in which we learn values and rules for building identity (Bloch, 1995). The research of complexity focused on our representation of territory. This is not territory in a physical sense but how we see it. For this reason, we included this variable in research and we think that it is related with self and metacognitive capacity.

RESEARCH

Method

In this research, we explored "metacognitive ability", "self-concept", "self-efficacy", trust in Sicilia Region Institution and other Sicilian firms, and "potential territory" in a sample of Sicilian entrepreneurs. Our aims is to verify if "metacognitive ability" and "self-efficacy" related positively with trust in Sicilia Region Institution and other Sicilian firms. Furthermore, we intended to ascertain the correlations between these variables and "Potential Territory".

Participants

Participants were 79 Sicilian entrepreneurs from city and region area of Enna (n=35), Caltanissetta (n=26) and Messina (n=18). The entrepreneurs were 72 men and 7 women with mean age of 40 years. These manage them firms (M= 42,08 years) since 12,97 years on average. The firms have for 79,7% one corporate-executive, for 13,9% company and 6,3% family-run business. Moreover, the firm's type are for 67,1% farms, 20,3% winery and 10,1% other (for a few of these, in both cases), one participant did not declare his firm's type.

Father's profession is for 54,4% entrepreneur (reflecting "*Transgenerational Entrepreneurship*": Habbershon, Nordqvist & Zellweger, 2010), while mother's profession is for 53,2% housewife.

Procedure

Participants, which were identified through websites and trade shows, were contacted individu-

ally. We sent an e-mail with attached "formal collaborative request" (with signature of Social Psychology owner chair). The request included research's purpose, method and name of the researcher who would have administered questionnaires, ascertain availability. The method of administration was face-to-face and the interviews were conducted in entrepreneur's office. To guarantee anonymity, researcher extracted questionnaire from a white envelope with sign of Catania University. After completion, he reinserted the questionnaire in the white envelope. The questionnaire included purposes, completion and privacy policy information.

Measures

Self concept scale. To assess self-concept, we used a measure that asked participants to respond 19 item about personal experiences. Participants responded to items on a 5-point likert scale ranging from 0 ("strongly agree") to 5 ("strongly disagree"). The scale included 4 sub-scales: problem-solving (for example: *"if I am not successful to do something, I try again as long as I can"*), relationship self-concept (*"It seems easy to make new friends"*), opinion about self (*"I feel insecure about most things"*), values in general (*"I feel to have the same value of my peers"*).

Measure of Adaptive Cognition (MAC, Haynie & Shepherd, 2009). This scale measures the metacognition abilities. Construction of MAC began with the adaptation of an instrument proposed by Schraw and Dennison (1994) to assess metacognitive awareness embedded within an educational context. Since the entrepreneurial context is defined by a myriad of task and potential outcomes (Hitt, Keats & DeMarie, 1998), Haynie and Shepherd changed it and defined the scale as *"a measure appropriate to investigate individual differences in cognitive adaptability in an entrepreneurial context"*. Participants responded to 35 items on a 7- point likert scale ranging from 0 ("strongly disagree") to 5 ("strongly agree"). The scale measures 5 sub-scales of metacognition:

Metacognitive Experience (8 items): the authors define metacognitive experiences *"to be the extent to which the individual relies on idiosyncratic experiences, emotions, and intuitions when engaging in the process of generating multiple decision frameworks focused on interpreting, planning and implementing goals to "manage a changing environment"*.

Metacognitive Knowledge (11 items): *"metacognitive Knowledge to be the extent to which the individual relies on what is already known about oneself, other people, tasks, and strategy when engaging in the process of generating multiple decision frameworks focused on interpreting, planning, and implementing goals to manage a changing environment"*.

Goal Orientation (5 items): *"the extent to which the individual interprets environments variations in light of a wide variety of personal, social, and organizational goals"*. Goal orientation serves to engage the metacognitive resources of metacognitive knowledge and metacognitive experience.

Metacognitive Choice (5 items): *"the extent to which the individual engages in the active process of selecting from multiple decision frameworks the one that best interprets, plans, and implements a response for the purpose of managing a changing environment"*.

Monitoring (6 items): *"a seeking and using feedback to reevaluate goal orientation metacognitive knowledge, metacognitive experience and metacognitive choice for the purposes of managing a changing environment"*.

Entrepreneurial Self-Efficacy (De Noble, Jung e Ehrlich, 1999): The scale is composed of 11 items and two subscales: Relationship self-efficacy in 5 items (for example to pay attention to employee) and problem-related self-efficacy in 6 items (for example innovation competence). Participants responded on a 5- point Likert scale ranging from -2 ("strongly disagree") to +2 ("strongly agree").

Trust scales: the questionnaire proposed a typical situation:

"the firm X, qualified in wine/cereal products, is a pride for quality and Sicilian tradition. The

increase in transport costs and the incorrect competition of other countries, who copy brand (with lower costs), represent problems for the firm. The entrepreneur of the firm thinks to start a promotional campaign of marketing to defend his products, underlying the quality. He thinks to ask collaboration of other firms, and economic support of Sicilia Region institution. He believes to be able to defend the quality of Sicilian product”.

About this, the participant had to answer to 4 items (about generic and specific aspects). He responded on a 5-point Likert scale ranging from -2 (“strongly distrust”) to +2 (“strongly trust”). This scale is the same for inter-firms trust.

Potential Territory. This scale measures (with 6 items on 5-point Likert scale) the entrepreneur’s idea about Sicilian potential territory. An example of item is “I see a territory rich of potential”, or “I see a territory rich of natural resource”.

RESULTS

Descriptive results

All scales yielded adequate internal consistency reliability estimates (Self-Concept $\alpha = .868$; MAC = .894; Entrepreneurial Self-Efficacy $\alpha = .816$; region trust $\alpha = .907$; inter-firm trust $\alpha = .885$; “Potential Territory” $\alpha = .811$).

Participants had a score $M = 3.2$ in self-concept scale, that is on the midpoint (*One test* to midpoint = 3, $t = 2.155$ $p = .034$). About results of MAC and entrepreneurial self-efficacy, participants showed high levels of metacognitive ability, $M = 5.54$ (Likert range 1-7), and of entrepreneurial self-efficacy, $M = 3.85$ (Likert range 1-5), (see Table 1).

Relative to scores of trust scales, participants attributed low scores to both scales ($M = 2.1$ for Sicilian Region Institution; $M = 2.9$ for inter-firms trust). The mean of region trust is significantly under the midpoint (*One test* to midpoint = 3, $t = -7.983$ $p < .001$), and the inter-firms trust is higher than Sicilian region trust ($t = -6.864$ $p < .001$). Our entrepreneurs showed to have distrust in other firms and Sicilian Region Institution; however they have more trust in other firms than Sicilian region (See Table 2)

The participant attributed high scores to “Potential Territory” scale $M = 4.58$, thus, they see a potential rich territory, in which they can find opportunities for work for their firms.

Correlation analysis

Across correlation analysis we can see that self-concept scale is significantly and positively correlated with monitoring, subscale of MAC, with $r = .226$ $p < .05$. Thus the self-concept, the belief and image oneself, is positively correlated with monitoring capacity, one’s ability to monitor and reevaluate goal in itinere. Then, although the entrepreneurs examined have low levels of self-concept, we believe that “monitoring ability” can increase this variable. In particular, the subscale “self” (of self-concept) is positively correlated with monitoring ($r = .244$ $p < .05$) and also with subscale “metacognitive choice” ($r = .248$ $p < .05$). This last relationship is interesting because the capacity “thinking about thinking”, cohesion of knowledge and experience, plays an important role in the image of self.

The subscales of MAC shows many correlations: first of all “Metacognitive Knowledge” correlates positively and significantly with “Sicilia Region trust” ($r = .230$ $p < .05$). We can assert that high levels of this ability are connected with trust in Institution. Then, if the entrepreneurs reinforce this capacity, the trust in Institution should grow. In the specific example, an entrepreneur with high levels of “metacognitive choice” ($r = .255$ $p < .05$) is potentially favorably disposed to have trust in Sicilia Region Institution. All the same way, the entrepreneurial relational self-efficacy is correlated with

Trust (both in Sicilia Region Institution, $r=.238$ $p<.05$; and Inter-firm trust, 280 $p<.05$, despite low means). We can assume that who perceive himself good at manage relational aspects, related workplace (example "*I am good at develop and promote the employee's idea*") can mainly have trust in other. Moreover, there is important observe the positive correlation between self-efficacy (also subscales) with MAC and some subscales.

We expected that MAC and "potential Territory" were positively correlated. In line with our expectations, who has high levels of Metacognitive ability is who sees positive potential in Sicilia territory.

Discussion and Conclusions

The research shows that the metacognitive abilities are fundamental aspects of entrepreneurs life. Also, self-concept and self-efficacy play an important role. The one's image of himself and one's beliefs about personal competences and control in a given situation, influence ability to choose. In a territory, like Sicilia, low given value, we think that the Sicilian entrepreneurs are able to change economic and cultural context, open themselves up to inter-firms collaboration. Then it is important to have trust in Institution and attract the interest of Institution at resource and problems territory. The figure of entrepreneur, with background of experience accrued (insights and related-work emotion), ability of "thinking about thinking" and ability to monitor and manage constantly his goals (Locke, Frederick, Lee & Bobko, 1984; Locke & Latham, 1990), is who is good at seeing potential territory.

The low inter-firms and Sicilia Region Institution trust could be managed by sensitization meetings, focused "making system" (Sicilian firms and Sicilia Region). The goal and the reason of cohesion could be an onion brand "made in Sicilia".

REFERENCES

- Barbosa, S., Gerardt, M., Kickul, J. (2007). The role of cognitive style and risk preference on entrepreneurial self-efficacy and entrepreneurial intentions. *Journal of Leadership and Organizational Studies*, 13, 86-104.
- Bloch, P.H. (1995). Seeking the ideal form: Product design and consumer response. *The Journal of Marketing*, 16-29.
- Bouty, I. (2000). Interpersonal and interaction influences in informal resource exchanges between R&D researchers across organizational boundaries. *Academy of Management Journal*, 43 (1), 50-65.
- Brodt, S., Korsgaard, M.A. (2003). Group identity and attachment: Two paths to trust and cooperation in groups. In *16th Annual IACM Conference Melbourne, Australia*.
- Brown, A. (1987). Metacognition and other mechanisms. In F.E. Weinert & R.H. Kuwe (Eds.), *Metacognition, motivation, and understanding* (pp. 65-116). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Burt, R. (1992). *Structural holes. The social structure of completion*. Cambridge:Harvard.
- Chen, C.C., Greene, P.G., Crick, A. (1988). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13(4), 295-316.
- De Noble, A., Jung, D., Ehrlich, S. (1999). Entrepreneurial self-efficacy: The development of a measure and its relationship to entrepreneurial action. *Frontiers of Entrepreneurship research*. Boston: Babson College.
- Di Nuovo, S., Giovannini, D., Loiero, S. (1999). Risolvere i problemi. Strategie cognitive
- Fichman, M. (2003). Straining towards trust: Some constraints essay on studying trust in organizations. *Journal of Organizational Behavior*, 24(2), 133-157.

- Flavell, J. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American psychologist*, 34, 906-911.
- Griffin, D., Ross, L. (1991). Subjective construal, social inference, and human misunderstanding. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol.24, pp.319-356). New York: Academic Press.
- Gulati, R. (1995). Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of management journal*, 38 (1), 85-112.
- Jarratt, D., ceric, A. (2015). The complexity of trust in business collaborations. *Australians marketing Journal*, 23(1), 2-12.
- Habbershon, T.G., Nordqvist, M., Zellweger, T. (2010). Transgenerational entrepreneurship. *Transegenerational entrepreneurship: exploring growth and performance in family firms across generations*, 1-38.
- Haynie, M., Shepherd, D.A. (2009). A measure of adaptive cognition for entrepreneurship research. *Entrepreneurship Theory and Practice*, 695-713.
- Hitt, M.A., Keats, B.W., De Marie, S.M. (1998). Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. *Academy of Management Executive*, 12, 22-42.
- Krueger, N.F., Reilly, M.D., Carsrud, A.L. (2000). Competing models of entrepreneurial intentions. *Journal of business Venturing*, 15, 411-432.
- James, W. (1890). The consciousness of self. *The principles of psychology*, 8.
- Larson, A. (1992). Network dyads in entrepreneurial setting: A study of the governance of exchange relationship. *Administrative science quarterly*, 76-104.
- Lewicki, R.J., McAllister, D.J., Bies, R.J. (1998). Trust and distrust: New relationships and realities. *Academy of management review*, 23(3), 438-458.
- Licciardello, O., Castiglione, C. (2008). *Self, formazione e "territorio potenziale" nella società del cambiamento: dati di ricerca con giovani disoccupati, sindaci ed imprenditori*. Acireale-Roma: Bonanno Editore
- Locke, E., Frederick, E., Lee, C., Bobko, P. (1984). Effect of self-efficacy, goals, and task strategies on task performance. *Journal of Applied psychology*, 69, 241-251.
- Locke, E., Latham, G. 1990). Work motivation and satisfaction: Light at the end of the tunnel. *Psychological Science*, 1, 240-247.
- Low, M.B., MacMillan, I.C. (1988). Entrepreneurship: Past research and future challenges. *Journal of management*, 14 (2), 139-161.
- McAllister, D.J. (1995). Affected-and cognition based trust as foundations for interpersonal cooperation in organizations. *Academic of Management Journal*, 38(1), 24-59.
- Markman, A.D., Baron, R.A. (2003). Person-entrepreneurship fit: why some people are more successful entrepreneurs than others. *Human Resource Management Review*, 13 (2), 281-301.
- Mellinger, G.D. (1956). Interpersonal trust as a factor in communication. *The Journal of Abnormal and Social Psychology*, 52 (3), 304.
- Nelson, T. (1996). Consciousness and metacognition. *American Psychologist*, 51, 102-129.
- N'Goala, G. (2010). Discovering the dark side of service relationship..or why long-lasting and exclusive relationship are self-destructing. *Recherche et Applications en Marketing (English Edition)*, 25, 3-30.
- O'Connor, E.O., Hill, C. A. (2006). A cognitive theory of trust.
- Paliszkievicz, J.O., (2011). Trust Management: Literature Review. *Management*, 6 (4).
- Phillips, J.M., Gully, S.M. (1997). Role of goal orientation, ability, need for achievement, and locus of control in the self-efficacy and goal-setting process. *Journal of Applied psychology*, 82(5),

- 792-802.
- Raimy, V.C. (1984). Self reference in counselling interviews. *Journal of Consulting Psychology*, 12(3),153.
- Roberts, K.H., O'Reilly, C.A. (1979). Some correlations of communication roles in organizations. *Academy of management journal*, 22(1), 42-57.
- Rosenberg, M. (1979). *Conceiving the self*. New York:Basic Books.
- Rosenberg, M. (1989). Self-concept research. A historical overview. *Social forces*, 68 (1), 34-44.
- Schacter, D.L., Dennison, R. (1994). Assessing metacognitive awareness. *Contemporary Educational Psychology*, 19, 460-475.
- Shapiro, S.P., (1987). The social control of impersonal trust. *American journal of sociology*, 623-658.
- Simons, T.L., Peterson, R.S. (2000). Task conflict and relationship conflict in top management teams: the pivotal role of intragroup trust. *Journal of applied psychology*, 85 (1), 102.
- Sztompka, P. (1999). *Trust: A sociological theory*. Cambridge University Press.
- Tsai, W., Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of management journal*, 41(4), 464-476.

Tabella 1. Description analysis

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	N	Media	DS	α
SELF CONCEPT	79	3,2	,840	.898
MAC	79	5,54	,694	.894
KNOWLEDGE	79	5,43	,770	.668
EXPERIENCE	79	5,70	,827	.753
CHOICE	79	5,41	1,085	.688
MONITORING	79	5,44	1,021	.795
GOAL ORIENTED	79	5,82	,887	.713
EFFICACY	79	3,85	,494	.816
EFFCOMP	79	3,82	,525	.757
EFFREL	79	3,84	,618	.730
TRUSTREG	79	2,1	,968	.907
TRUSTAZ	79	2,9	,960	.885
TERRITORY	79	4,58	,538	.811

Table. 2 Comparison Sicilia Region trus vs inter-firms trust (N 79)

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	Region		Inter-Firms		<i>t</i>	p
	X	DS	X	DS		
I trust in the possibility to be supported	2,08	1,047	2,76	1,053	-4,550	,000*
I trust that acts	2,10	1,033	2,67	1,140	-4,356	,000*
I trust in its commitment	2,20	1,148	3,33	1,195	-6,890	,000*
I trust that takes into account of my proposal	2,14	1, 152	3,09	1,064	-7,178	,000*
Total Scale	2,1297	,96896	2,9620	,96084	-6,864	,000*

Table 3 Comparison scales "Trust" with one test to midpoint (3)

Table 3 Comparison scales "Trust" with one test to midpoint (3)			
	X	<i>t</i>	p
TRUSTREG	2,1297	-7,983	,000*
TRUSTREG1	2,08	-7,843	,000*
TRUSTREG2	2,10	-7,735	,000*
TRUSTREG3	2,20	-6,175	,000*
TRUSTREG4	2,14	-6,643	,000*
TRUSTAZ	2,9620	-,351	,726
TRUSTAZI1	2,76	-2,031	,046*
TRUSTAZI2	2,67	-2,565	,012*
TRUSTAZI3	3,33	2,447	,017*
TRUSTAZI4	3,09	,740	,462

